



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,880	02/22/2002	Rosario Maggio	34051	6025
116	7590	04/01/2004	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			DEL SOLE, JOSEPH S	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,880

Applicant(s)

MAGGIO ET AL.

Examiner

Joseph S. Del Sole

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 6, 10 and 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/01
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Drawings

1. The drawings are objected to because the reference numerals and the lines of the drawing are not uniformly thick and well defined; reference numerals 14 and 15 in particular should be moved away from the lines drawn to represent filaments. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

Art Unit: 1722

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balk (4,820,142) in view of Trimble et al (5,397,413).

Balk teaches a device for opening and distributing a bundle of drawn filaments to be formed into a nonwoven textile web deposited on a movable receiving belt (Fig 1); the device having an assembly (Fig 1, #6) through which the filaments pass before being deposited on the receiving belt (Fig 1, #7); the bundle of filaments being disposed in a curtain configuration and having a bundle width, the assembly including a diffuser (Fig 1, #6) having an inlet zone formed by a convergent nozzle (Fig 1, #15, the flaps converge to form the nozzle) extending along the entire bundle width for receiving filaments; a divergent nozzle (Fig 1, #s 18 and 19, portion #19 is divergent and flaps #18 are adjustable to be divergent, col 3, lines 25-28 and col 3, lines 44-50) connected to the convergent nozzle for receiving filaments from the latter; the bundle of filaments is emitted from a drawing slot (Fig 1, #4) positioned upstream of the inlet zone and an intake flow of air is provided at the inlet zone by a venturi effect produced in the divergent nozzle by air passing therethrough with the filaments (Fig 1); the air is injected into the diffuser and passes from the diffuser through the divergent nozzle (Fig 1); the

convergent nozzle includes a pair of converging walls and the divergent nozzle includes a pair of diverging walls.

Balk fails to teach a rail for electrostatically charging the filaments before they are deposited on the receiving belt.

Trimble et al teach a rail (Fig 2, #18) for electrostatically charging filaments before they are deposited on the receiving belt for the purpose of causing the filaments to repel one another, separate and spread apart such that they are randomly deposited on a belt (col 5, lines 27-37).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Balk with a rail as taught by Balk because it enables a random deposition of filaments on the belt.

6. Claims 5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geus et al (5,800,840) in view of Trimble et al (5,397,413).

Geus et al teach a device for opening and distributing a bundle of drawn filaments to be formed into a nonwoven textile web deposited on a movable receiving belt (Fig 1); the device having an assembly (Fig 1, #3) through which the filaments pass before being deposited on the receiving belt (Fig 1, #4); the bundle of filaments being disposed in a curtain configuration (Fig 1, #5 and col 4, lines 1-10) and having a bundle width, the assembly including a diffuser (Fig 1, #3) having an inlet zone formed by a convergent nozzle (Fig 2, the portion of #3 above #28) extending along the entire bundle width for receiving filaments; a divergent nozzle (Fig 2, the portion of #3 below #28) connected to the convergent nozzle for receiving filaments from the latter; the

bundle of filaments is emitted from a drawing slot (Fig 1, #21) positioned upstream of the inlet zone and an intake flow of air is provided at the inlet zone by a venturi effect produced in the divergent nozzle by air passing therethrough with the filaments (Fig 1); the air is injected into the diffuser and passes from the diffuser through the divergent nozzle (Fig 1, #s 23 and #33).

Geus et al fail to teach a rail for electrostatically charging the filaments before they are deposited on the receiving belt.

Trimble et al teach a rail (Fig 2, #18) for electrostatically charging filaments before they are deposited on the receiving belt for the purpose of causing the filaments to repel one another, separate and spread apart such that they are randomly deposited on a belt (col 5, lines 27-37).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Geus et al with a rail as taught by Balk because it enables a random deposition of filaments on the belt.

Allowable Subject Matter

7. Claims 6, 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or suggest a rectilinear slot containing a mounted rail for electrostatic charging; wherein the rail connects a convergent nozzle and a divergent nozzle, the rail is immediately upstream of a divergent nozzle; the

Art Unit: 1722

nozzles form a diffuser through which drawn filaments travel before begin deposited on a receiving belt.

Correspondence

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (571) 272-1151. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from the either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Joseph S. Del Sole

J.S.D.

March 18, 2004